

positive and negative electrodes facing each other with a separator interposed between them,

with an organic electrolyte comprising

benzene or its chlorine derivative having at least one hydrogen atom of benzene substituted by a chlorine atom,

said organic electrolyte being capable of forming an electric double layer on the surface of the electrodes to store electric charge,

said impregnating resulting in substituting water adsorbed to a carbonaceous material contained in said positive and negative electrodes, to obtain desorbed water;

applying a voltage to the element, thereby expelling said desorbed water from said element; and

maintaining said element at reduced pressure;

wherein said positive and negative electrodes comprise said carbonaceous material having a specific surface area of from 100 to 3,000 m²/g; and

wherein the organic electrolyte further comprises

a) a solvent selected from the group consisting of ethylene carbonate, propylene carbonate, butylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, acetonitrile, glutaronitrile and a mixture thereof; or

b) a solvent mixture of sulfolane and a solvent selected from the group consisting of ethylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, acetonitrile, glutaronitrile and a mixture thereof; or

c) a solvent mixture of a sulfolan derivative and a solvent selected from the group consisting of ethylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, acetonitrile, glutaronitrile and a mixture thereof.

12. (Twice Amended) A method for producing an electric double layer capacitor, comprising:

impregnating an element comprising

positive and negative electrodes facing each other with a separator interposed between them,

with an organic electrolyte comprising

benzene or its chlorine derivative having at least one hydrogen atom of

benzene substituted by a chlorine atom,

D2 cont said organic electrolyte being capable of forming an electric double layer on the surface of the electrodes to store electric charge,

said impregnating resulting in substituting water adsorbed to a carbonaceous material contained in said positive and negative electrodes, to obtain desorbed water;

applying a voltage to the element in a dry atmosphere in an open condition, thereby expelling said desorbed water from said element; and

maintaining said element at reduced pressure;

wherein said positive and negative electrodes comprise said carbonaceous material having a specific surface area of from 100 to 3,000 m²/g; and

wherein the organic electrolyte further comprises

a) a solvent selected from the group consisting of ethylene carbonate, propylene carbonate, butylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, acetonitrile, glutaronitrile and a mixture thereof; or

b) a solvent mixture of sulfolane and a solvent selected from the group consisting of ethylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, acetonitrile, glutaronitrile and a mixture thereof; or

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c) a solvent mixture of a sulfolan derivative and a solvent selected from the group consisting of ethylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, acetonitrile, glutaronitrile and a mixture thereof.

20. (Twice Amended) A method for producing an electric double layer capacitor, comprising:

impregnating an element comprising

positive and negative electrodes facing each other with a separator interposed between them,

with an organic electrolyte comprising

benzene or its chlorine derivative having at least one hydrogen atom of benzene substituted by a chlorine atom,

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said organic electrolyte being capable of forming an electric double layer on the surface of the electrodes to store electric charge,

said impregnating resulting in substituting water adsorbed to a carbonaceous material contained in said positive and negative electrodes, to obtain desorbed water;

applying a voltage to the element, thereby expelling said desorbed water from said element; and

maintaining said element at reduced pressure of at most 160 Torr;

wherein said positive and negative electrodes comprise said carbonaceous material having a specific surface area of from 100 to 3,000 m²/g; and

wherein the organic electrolyte further comprises

a) a solvent selected from the group consisting of ethylene carbonate, propylene carbonate, butylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, acetonitrile, glutaronitrile and a mixture thereof; or

b) a solvent mixture of sulfolane and a solvent selected from the group consisting of ethylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, acetonitrile, glutaronitrile and a mixture thereof; or

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c) a solvent mixture of a sulfolan derivative and a solvent selected from the group consisting of ethylene carbonate, dimethyl carbonate, ethyl methyl carbonate, diethyl carbonate, acetonitrile, glutaronitrile and a mixture thereof.

BASIS FOR THE AMENDMENTS

Claims 5, 12 and 20 have been amended as supported at page 6, lines 7-19 of the specification.

No new matter is believed to be added by entry of the amendments. Upon entry of the amendments, Claims 2-5, 7-9, 11-17, and 19-26 will be active.

REMARKS

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

In an electric double layer capacitor, the presence of water in: 1) the organic electrolyte, 2) the solvent or 3) the pores of an electrode material, such as carbon, is detrimental for the performance of the capacitor and leads to decreased capacitance and increased internal resistance. If the **moisture** in the cells **is electrolyzed** to form a gas, the **gas remains in the pores and expels electrolyte from the pores. This will lower the capacitance**, particularly after long-term use. It is therefore an object of the present invention to maintain a high capacity of an electric capacitor by preventing the degrading of its performance due to the presence of water. Accordingly, the present invention as set forth in